3Com

3Com® Network Jacks

Key Benefits

Transform a simple LAN outlet into a four-port, "in the wall" Fast Ethernet switch

Cost-Saving Infrastructure Expansion
Quadruple your LAN ports with significantly lower costs and fewer disruptions than pulling extra Ethernet cables.

Adaptable Device Connectivity
One 3Com® Network Jack provides four 10/100 Mbps switched LAN ports and optional ports for telephony or additional LAN connections.

"In the Wall" Design
Compact wall-mounted unit reduces workspace clutter and safeguards network connectivity from tampering, damage, or theft.

Flexible Power
Options include IEEE P802.3af draft Power over Ethernet, locally available AC power, and power forwarding.

Converged, Secure Networks
Advanced capabilities including traffic prioritization, port-based VLANs, and a "location mapping" feature that optimize network-jack connections for voice, video, and data.

Seamless Integration
Standards compliance includes Ethernet, Fast Ethernet, Voice over IP (VoIP), Power over Ethernet, and building and telecommunications wiring specifications.

Drop-In Installation
Switches mount without disturbing wall spaces, making them particularly suited for older or hard-to-wire facilities.

3Com Network Jacks work in almost any network environment—including small-office or enterprise businesses, government offices, dormitories, hospitals, K-12 classrooms, universities, laboratories, public kiosks, conference rooms, and shared office spaces. Unlike freestanding hubs or switches, network jacks are not easily damaged or disconnected; nor will they "grow legs and vanish."

One NJ90 Network Jack expands a single LAN link into four autonegotiating 10/100 Mbps LAN ports. The NJ100 and NJ200 provide added flexibility with optional pass-through connectivity and Power over Ethernet forwarding capabilities. The intelligent NJ200 comes with advanced switching

and management capabilities, making it particularly suited for converged voice and data environments.

3Com Network Jacks power sources, which are required and sold separately, include inline Power over Ethernet and local AC adapters. For an integrated endspan solution, the 3Com SuperStack® 3 Switch 4400 PWR combines standard data switching and power injection in a single network appliance.

For more information on how network jacks help resolve common networking problems—including case studies, hardware reviews, and white papers—please visit **www.3com.com/networkjack**.

3Com Network Jack Setup

Figure 1: P802.3af-compliant Power over Ethernet network configuration with power forwarding to another device.

1 3Com SuperStack 3 Switch 4400 PWR (3C17205) delivers data and power over Category 5/5e cabling.

2 3Com Network Jack's switched ports prioritize voice and data traffic for connected devices.

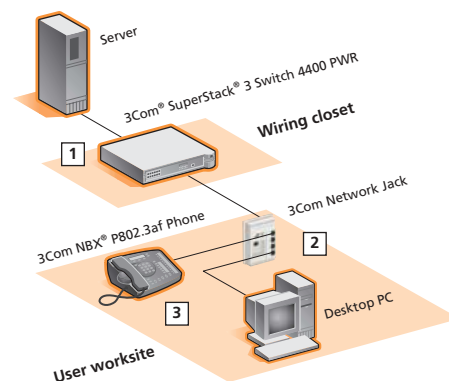3 Models NJ100 and NJ200 forward Power over Ethernet to a 3Com NBX P802.3af Phone or other P802.3af-compliant device.
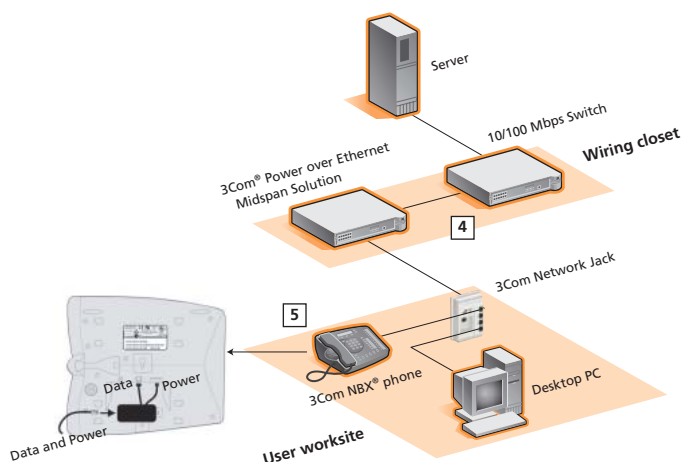

Figure 1

Figure 2

Figure 2: Retrofitting an existing Ethernet infrastructure to support Power over Ethernet.

4 3Com Power over Ethernet Multiport or Single-Port Midspan Solution (3CNJPSE24, 3CNJPSE) injects 48 VDC Power over Ethernet into existing 10/100 Mbps switched connections.

5 A prestandard 24-volt NBX phone can be modified with the 3Com NBX Phone Power Module (3CNJVOIPMOD-NBX) to accept 48 VDC Power over Ethernet.

Figure 3: The 3Com Network Jack AC Power Supply (3CNJPSL) is required for LANs without Power over Ethernet capabilities.

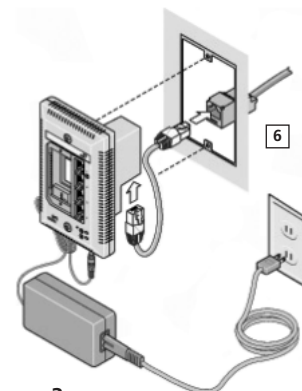6 LAN-facing downlink port and cabling are concealed behind the faceplate.

Figure 3

More cost-effective than Category 5e cabling, more secure than a desktop hub or switch

3Com NJ200 Network Jack
This "in the wall" managed switch comes bundled with software utilities that help streamline administration tasks and boost network security. Advanced switching and management features make it ideal for connecting networked telephony. Compatible phones can be powered from port 1,

saving in wiring expense. For optimum quality and security, voice traffic can be labeled high priority and routed through its own VLAN. Enterprise-ready, the NJ200 can be discovered and controlled by most SNMP-compliant management platforms— including 3Com Network Supervisor and HP OpenView.

3Com NJ100 Network Jack

The NJ100 provides the same connectivity options as the NJ200, but without management support. Optional pass-through ports and Power over Ethernet forwarding let you to terminate additional voice, cable, or network wiring in the same wall outlet. The wall-mounted case provides durability and permanence for high-traffic locations, such as printer rooms or public kiosks.

3Com NJ90 Network Jack

For networks that don't require device manageability or extra pass-through ports, this unmanaged 10/100 Mbps switch can deliver significant cost-savings when compared to pulling and activating Category 5e cabling for the same number of LAN connections.

Power over Ethernet

In addition to the SuperStack endspan switch, 3Com offers 24- and single-port midspan power source equipment (PSE) that inject Power over Ethernet into existing switched networks. For large installations, the cost-saving Power over Ethernet bundle includes a P802.3af-compatible 24-port midspan PSE, 20 network jacks, and accessories. To help preserve your telephony investments, an optional power-conversion module enables prestandard 3Com NBX® phones to support P802.3af-compliant inline power.

Features and Benefits

Performance, Reliability, Savings	NJ200	NJ100	NJ90
Instantly quadruples switched network infrastructure without disturbing wall spaces or business operations.	✔	✔	✔
Supports 802.1p Packet Prioritization.	✔		✔
Standards Compatibility			
Complies with Ethernet, VoIP, telecommunications, and building standards.	✔	✔	✔
Mounts in U.S.-standard wall cutouts; also fits cutouts for Canada, Mexico, and the rest of Latin America.	✔	✔	✔
Power Options			
Supports IEEE P802.3af draft specification for Power over Ethernet.	✔	✔	✔
Supports local AC power; requires 3Com power supply (3CNJPSL).	✔	✔	✔
Forwards Power over Ethernet to another device.	✔	✔	
Supports NBX power module (3CNJVOIPMOD-NBX).	✔	✔	
Port Options			
Supports pass-through adapter plates for additional connectors, including AMP, Avaya, Hubbell, Ortronics, and Panduit.	✔	✔	
Management			
Works with standards-based SNMP network management applications, including 3Com Network Supervisor and HP OpenView.	✔		
3Com Local Configuration Manager streamlines installation and configures network jacks to support central management.	✔		
3Com Central Configuration Manager provides timesaving, remote monitoring and management—from a single device port to groups of multiple network jacks.	✔		
Location Mapping pinpoints physical location of network jack-connected devices; facilitates network troubleshooting and IT asset inventories.	✔		
Advanced switching features include TOS/Diffserv and multicast flooding control.	✔		
Supports port-based VLANs for improved data security and monitoring.	✔		

Specifications

Cables and Operating Distances

10BASE-T: Category 3, 4, 5, or 5e UTP/STP up to 100 m (328 ft)

100BASE-TX: Category 5 or 5e UTP/STP up to 100 m (328 ft)

Ports

Ethernet switch: Four 10/100BASE-TX ports for RJ-45 connectors; store-and-forward, full-/half-duplex, autonegotiation.

Optional pass-through (NJ100, NJ200 only): Up to two ports for RJ-11 and/or RJ-45 connectors; requires installation of AMP, Avaya, Hubbell, Ortronics, or Panduit adapter plate in place of the blank plate.

Power Options

Power over Ethernet: Supports any P802.3af-compliant source and most 24 VDC and 48 VDC inline sources.

Local AC power: 3Com Network Jack AC Power Supply (3CNJPSL) is required for LANs that do not have Power over Ethernet capabilities.

Power forwarding (NJ100, NJ200 only): Device receiving power must be P802.3af-compliant or a 3Com NBX phone with power-conversion module (3CNJVOIPMOD-NBX).

Management (NJ200 only)

Compatible with SNMP v1, port-based VLANs, 802.1p Packet Prioritization/QoS, DHCP, most SNMP-compliant management platforms; 3Com Network Supervisor recommended. For information on management system requirements, including support for Windows XP, visit **www.3com.com** or contact your local 3Com sales office

Standards Compliance

Networking: 802.3, 802.3u, P802.3af draft

Building: NEMA-WD6, ANSI/TIA/EIA-568 and -569

Safety, Emissions: ICES-003 Class A; VCCI Class A; FCC Class A, CSA, C-Tick, NOM

Environmental

Temperature: 0° to 35° C (32° to 95° F) operating, office environment; -30° to 90° C (-22° to 194° F) storage

Humidity (noncondensing): 10%–90% operating, 5%–95% storage

Altitude: 0–2,000 m (0–8,000 ft) operating, 0–6,100 m (0–20,000 ft) storage

LED Indicators

Unit power, link activity/status of ports; power forwarding (NJ100, NJ200 only)

Package Contents

NJ90 single-pack: One network jack and mounting screws, RJ-45 coupler cable, user guide

NJ90 20-pack: 20 network jacks and mounting screws, 20 RJ-45 coupler cables, one user guide

NJ100/NJ200 single-pack: One network jack and mounting screws, RJ-45 coupler cable, three adapter plates (Panduit, Avaya, blank), user guide; NJ200 includes quick start guide and CD-ROM with management utilities

NJ100/200 20-pack: 20 network jacks and mounting screws, 20 RJ-45 coupler cables, 20 blank adapter plates, user guide: NJ200 includes quick start guide and CD-ROM with management utilities

Avaya/Panduit adapter plates, 20-pack: 20 adapter plates and mounting screws

Hubbell/AMP/Ortronics adapter plates, 20-pack: 20 snap-in adapter plates

Power over Ethernet source: Power switch/midspan PSE, power cord

Local power source: AC power adapter, power cord

NBX module: Phone module, hook-and-loop mounting strip

Product Warranty

For details on product warranties, support, and service—including extended service contracts—please refer to the product manual or visit our warranty support page at **www.3com.com**.

Customer Support

3Com Knowledgebase offers proven answers and technical expertise—7 days a week, 24 hours per day. Explore our Knowledgebase, as well as product information, technical tips, and FAQs by visiting **www.3com.com**.

Dimensions

	Height	Width	Depth
Network jack	11.4 cm (4.50 in)	7.0 cm (2.75 in)	5.8 cm (2.30 in)
Adapter plate	2.6 cm (1.02 in)	5.8 cm (2.3 in)	0.2 cm (0.08 in)
Endspan PoE switch	1 RU 4.36 cm (1.71 in)	19-in rack 44.0 cm (17.32 in)	27.4 cm (10.78 in)
24-port midspan PSE	1 RU 4.40 cm (1.73 in)	19-in rack 43.3 cm (17.04 in)	30.2 cm (11.88 in)
Single-port midspan PSE	2.6 cm (1.02 in)	6.4 cm (2.52 in)	10.2 cm (4.02 in)
AC power supply	3.8 cm (1.50 in)	5.1 cm (2.00 in)	8.9 cm (3.50 in)
NBX module	2.4 cm (0.94 in)	7.8 cm (3.07 in)	3.8 cm (1.50 in)
Extension ring	10.2 cm (4.01 in)	5.2 cm (2.05 in)	0.8 cm (0.30 in)

Ordering Information

3Com NJ90 Network Jack (single-pack, cream)	3CNJ90
3Com NJ90 Network Jack (20-pack, cream)	3CNJ90-20
3Com NJ100 Network Jack (single-pack, black)	3CNJ100-BLK
3Com NJ100 Network Jack (single-pack, cream)	3CNJ100-CRM
3Com NJ100 Network Jack (20-pack, black)	3CNJ100-BLK-20
3Com NJ100 Network Jack (20-pack, cream)	3CNJ100-CRM-20
3Com NJ100 Network Jack Power over Ethernet Bundle (20-pack, black)	3CNJ100POE-BLK-20
3Com NJ100 Network Jack Power over Ethernet Bundle (20-pack, cream)	3CNJ100POE-CRM-20
3Com NJ200 Network Jack (single, black)	3CNJ200-BLK
3Com NJ200 Network Jack (single, cream)	3CNJ200-CRM
3Com NJ200 Network Jack (20-pack, black)	3CNJ200-BLK-20

3Com NJ200 Network Jack (20-pack, cream)	3CNJ200-CRM-20
3Com NJ100/200 Network Jack AMP Adapter Plates (20-pack, black)	3CNJAPB-AM-20
3Com NJ100/200 Network Jack AMP Adapter Plates (20-pack, cream)	3CNJAP-AM-20
3Com NJ100/200 Network Jack Avaya Adapter Plates (20-pack, black)	3CNJAPB-AV-20
3Com NJ100/200 Network Jack Avaya Adapter Plates (20-pack, cream)	3CNJAP-AV-20
3Com NJ100/200 Network Jack Hubbell Adapter Plates (20-pack, black)	3CNJAPB-HU-20
3Com NJ100/200 Network Jack Hubbell Adapter Plates (20-pack, cream)	3CNJAP-HU-20
3Com NJ100/200 Network Jack Ortronics Adapter Plates (20-pack, black)	3CNJAPB-OR-20
3Com NJ100/200 Network Jack Ortronics Adapter Plates (20-pack, cream)	3CNJAP-OR-20
3Com NJ100/200 Network Jack Panduit Adapter Plates (20-pack, black)	3CNJAPB-PA-20

3Com NJ100/200 Network Jack Panduit Adapter Plates (20-pack, cream)	3CNJAP-PA-20
3Com SuperStack 3 Switch 4400 PWR (24 ports, P802.3af-compliant)	3C17205-xx
3Com Power over Ethernet Multiport Midspan Solution (24 ports, P802.3af-compliant)	3CNJPSE24-xx
3Com Power over Ethernet Single-Port Midspan Solution (48 VDC)	3CNJPSE-xx
3Com Network Jack AC Power Supply	3CNJPSL-xx
3Com NBX Phone Power Module (single-pack, black)	3CNJVOIPMOD-NBX
3Com NBX Phone Power Module (20-pack, black)	3CNJVOIPMOD-20
3Com Network Jack Extension Ring	3CNJEXTRING

Please note: 3Com Network Jacks require power from either inline Power over Ethernet or a local AC source.

3Com part numbers ending in "-xx" indicate regional power options are available. Please consult our online *3Com Network Jack, Power Options, and Country Selection Guide* at **www.3com.com/networkjack_selector** for a detailed listing.

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Possible made practical™

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To learn more about 3Com solutions, visit www.3com.com. 3Com is publicly traded on Nasdaq under the symbol COMS.